

REMARKS/ARGUMENTS

Claims 1-9 and 18-20 remain pending for further prosecution. Although none of the claims has been amended, a Listing of Claims has been included for convenience.

Allowable Subject Matter

Claims 18-20 are allowed. Claims 5, 7, and 8 are objected only because they are dependent upon a rejected base claim, but would otherwise be allowable if rewritten in independent form.

Telephone Conference

The Applicants note with appreciation the telephone conversation with Examiner Brandi Thomas on April 8, 2008. In general, the Applicants' representative, Sorinel Cimpoes, stated (as explained in more detail below) that the pending claims should be allowable at least because the cited references fail to disclose at least one claim element and, also, teach away from the claimed embodiments. In response, Examiner Thomas alleged that it would be obvious to one of ordinary skill in the art integrate component supports with a bench base. Although no agreement was reached regarding the rejections, Examiner Thomas agreed to discuss the application prior to issuing a next office (unless the next office is a notice of allowance). Accordingly, Examiner Thomas stated (and the Applicants are appreciative) that she would contact the Applicants to discuss any further rejections after she has reviewed the current response and prior to issuance of a next office.

§ 103 Rejections

Claims 1-3, 6, and 9 were rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over U.S. Patent No. 4,621,006 to Terry *et al.* (“Terry”) in view of U.S. Patent No. 5,039,043 to Hodge (“Hodge”). Claim 4 was rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Terry in view of Hodge and, further, in view of U.S. Patent No. 6,771,437 B1 to Willis (“Willis”). Claim 1 is the only rejected independent claim.

As described below, numerous office actions have repeatedly acknowledged the patentability of claim 1 over several references. The Applicants respectfully submit, as explained in more detail below, that the combination of Terry and Hodge fails to add any further support for the § 103 rejection than previously cited references. Terry discloses the same type of system disclosed by previous references, over which claim 1 has been acknowledged to be patentable. For example, similar to previous references, Terry fails to disclose “optical component supports cast with and integral with said base,” and teaches away from the proposed modification.

A. Summary of Previous Rejections and Arguments Including Current Office Action

First Office Action

Claim 1 was originally rejected in a first office action (dated April 10, 2006) under § 103 as being allegedly unpatentable over U.S. Patent No. 6,858,839 to Anderson (“Anderson”).

In response, the Applicants argued, *inter alia*, a) that Anderson failed to disclose “optical component supports cast” with the base; b) that the proposed modification would render the Anderson bench unsatisfactory for its intended purpose; c) that the proposed modification would

change the principle of operation of the Anderson bench; d) that the proposed modification is contrary to accepted wisdom in the art; and e) that the claimed invention provides numerous advantages over the bench disclosed by Anderson. The next (second) office action agreed.

Second FINAL Office Action

A second office action (dated September 29, 2006) changed the rejection (under § 103 over Anderson) to a rejection under § 102(e) in view of U.S. Patent Application Publication No. 2004/0032817 to Hikake (“Hikake”). The second office action was deemed to be final.

In general, the response noted that the finality of the final office should be removed because Hikake was introduced for the first time in the final office, Hikake was being relied on as the primary reference for rejecting the pending claims, and none of the Applicant’s amendments necessitated a new search. Additionally, the response noted that Hikake is not prior art. The next (third) office action agreed.

Third (Non-Final) Office Action

A third office action (dated February 23, 2007) acknowledged that the previous finality should be withdrawn. A new rejection under § 103 was made alleging that claim 1 is unpatentable over U.S. Patent No. 5,597,149 to Hodge (“Hodge”).

In response, the Applicants argued, *inter alia*, a) that Hodge teaches away; b) that the proposed modification would render the mounting system of Hodge unsatisfactory for its intended purpose; c) that the proposed modification would change the principle of operation of the mounting system disclosed by Hodge; and d) that the claimed invention provides numerous advantages.

Fourth FINAL Office Action

A fourth office action (dated July 26, 2007) was deemed final and generally repeated the previous rejections. In addition, the office action alleged that making supports “flexible” or “inflexible” did not render the rejected claims patentable.

In response, the Applicants emphasized, *inter alia*, that Hodge failed to provide support for the rejection especially in view of the fact that Hodge’s “flexible” system teaches away from the proposed modification and that the proposed modification would be rendered unsatisfactory for its intended purpose. The next (fifth/current) office action has agreed.

Fifth (Non-Final) Office Action

The current office action (dated January 10, 2008) is the fifth office action in this patent application (with no Requests for Continued Examination). The current office action has withdrawn the finality of the previous office action and is relying on Terry and Hodge for rejecting claim 1.

The Applicants respectfully note that the combination of Terry and Hodge fails to render claim 1 unpatentable. In fact, it is respectfully submitted that the combination of Terry and Hodge provides no more support for the § 103 rejection than Anderson (first office action) or Hodge (third and fourth office actions).

B. Terry and Hodge Fail To Disclose At Least One Claim Element Of Claim 1

Terry and Hodge fail to disclose “optical component supports cast with and integral with said base.” The current office action acknowledges that Terry “does not specifically disclose a

plurality of optical component supports cast with and integral with said base.” The fourth office has already acknowledged that Hodge “does not specifically disclose the supports integral with the base.” Thus, the office action admits that the cited combination of references fails to disclose at least one claim element.

C. No Objective Reason For Support Of Obviousness Allegation

Although the current office action recognizes that the combination of Terry and Hodge fails to disclose at least one claim element of claim 1, the office action is attempting to bypass this missing element by alleging that it “would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention to include the supports cast with and integral with said base, since it has been [held] that forming in one piece an article which has formerly been formed in two pieces and put together involves only routine skill in the art.”

However, a “statement that modifications of the prior art to meet the claimed invention would have been ‘well within the ordinary skill of the art’ at the time the claimed invention was made’ because the references relied upon teach that all aspects of the claimed invention were individually known in the art is not sufficient to establish a *prima facie* case of obviousness without some objective reason to combine the teachings of the references.” Manual of Patent Examining Procedure, Rev. 6, Sept. 2007, § 2143.01 (IV), p. 2100-140 (left column).

In our case, it is clear that the references relied upon do not teach all aspects of the claimed invention. Furthermore, no objective reason has been provided for supporting the allegation that it would have been obvious to “include the supports cast with and integral with said base.” In fact, no objective reason can be provided because, as explained below, Terry and Hodge teach away from the suggested modification.

D. *Terry and Hodge Teach Away From The Claimed Invention Of Claim 1*

The Applicants have previously argued, and the office actions have acquiesced, that the holding that “forming in one piece an article which has formerly been formed in two pieces” does not apply when, for example, the cited reference teaches away from the claimed invention or when the proposed modification would render the system taught by the cited reference unsatisfactory for its intended purpose.

For example, the first office action had alleged in reference to Anderson that the invention was not patentable because it has been held that “forming in one piece an article which has formerly been formed in two pieces” involves only routine skill in the art. Nevertheless, in response to the Applicants’ arguments, the second office action acquiesced that this holding does not apply to claim 1 at least because Anderson failed to disclose the same claim element that is not disclosed by Terry and Hodge, because the proposed modification would have rendered the Anderson bench unsatisfactory for its intended purpose, etc.

Similarly, the third office action and the fourth office action made a similar allegation in reference to Hodge, alleging that the invention was not patentable because it has been held that “forming in one piece an article which has formerly been formed in two pieces” involves only routine skill in the art. And, similarly, the current office action has acquiesced that this holding does not apply to claim 1.

Referring to Terry, the newly added reference, it discloses honeycomb panels or tables 10 that have “a large number of mounting holes.” Terry, col. 2, l. 13. In fact, Terry makes it clear that “such mounting holes are present in great number and are tapped, thereby permitting in the mounting of optical instruments and other components in a wide variety of desired locations.”

Id., col. 2, ll. 15-18 (emphasis added). For example, Terry discloses that “an actual honeycomb table for optical purposes typically has thousands of tapped mounting holes arranged in a regular grid pattern.” *Id.*, col. 5, ll. 8-10.

Terry’s honeycomb tables are directed to a flexible system (similar to the optical bench 10 of Hodge) for mounting the optical components. “Thousands” of mounting holes translate in numerous positions for mounting the optical components. Thus, similar to Hodge’s optical table 10, integration posts into Terry’s honeycomb table 10 would defeat the purpose of providing a table that has “thousands” of mounting holes.

The Applicants respectfully note that the current specification identifies specifically the type of problems associated with Terry’s honeycomb table 10. For example, the current specification describes that “threaded connections between the component supports and the base may become loose over time, decreasing the accuracy of component placement.” Current Specification, ¶ 0005. Further, the current specification describes that “the number of mounting components such as posts and fasteners in known optical bench systems increases the complexity and difficulty of using optical benches.” *Id.* The “thousands” of mounting holes in Terry’s honeycomb table 10 is exactly the type of system for which claim 1 is intended to provide a solution, such as maintaining stability of component placement and ease of use over time.

E. The Invention Of Claim 1 Provides Numerous Advantages Over The Systems of Terry Or Hodge

Similar to previous arguments, the invention of claim 1 is intended to solve, in part, the type of problems associated with systems such as the one disclosed by Terry, which is generally similar to systems disclosed by Hodge and Anderson (over which the office actions have

repeatedly acquiesced that claim 1 is patentable). Terry adds nothing more in addition to what is disclosed in Hodge or Anderson.

More specifically, Terry's honeycomb table 10 requires the mounting and removal of components to the numerous mounting holes. The claimed integrated component supports and bench base overcome numerous problems associated with the Terry's honeycomb table 10, including increasing accuracy of component placement by eliminating the need for threaded connections, eliminating the need to remember the location of component supports when moved for experimentation, etc. In general, the invention of claim 1 reduces the complexity and difficulty of using optical benches, such as Terry's honeycomb table 10, Hodge's optical bench 10, etc.

Conclusion

The Applicants respectfully submit that the rejected claims are patentable over the cited references at least for the above stated applicable reasons. It is the Applicants' belief that all of the claims are now in condition for allowance and action towards that effect is respectfully requested. If there are any matters which may be resolved or clarified through a telephone interview, the Examiner is requested to contact the undersigned attorney at the number indicated.

It is believed that no fees are due; however, should any additional fees be required (except for payment of the issue fee), the Commissioner is authorized to deduct the fees from Nixon Peabody LLP. Deposit Account No. 50-4181, Order No. 247080-000047USPT.

Respectfully submitted,



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